Total Maximum Daily Load (TMDL) Implementation



Mill Creek and Kissinger Millpond Watershed
Northumberland County

May Louise Sligh

VA Dept. of Conservation and Recreation April 28, 2010



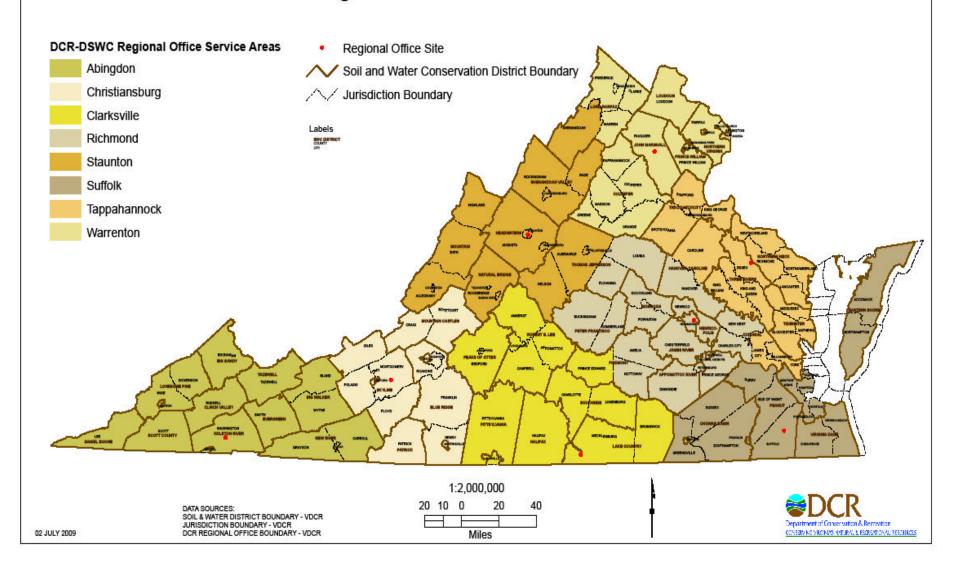
The TMDL Process: 3 Steps

- 1) TMDL study
- 2) TMDL implementation plan (clean-up plan)
- 3) Implement plan



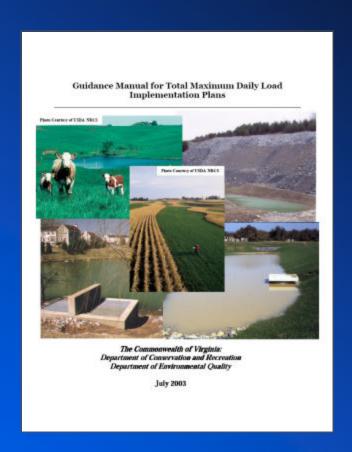
VA DCR - DIVISION OF SOIL & WATER CONSERVATION

Regional Office Service Areas



Why Implementation Plans?

- Implementation Plan development is required by state legislation
- Supported by federal, state and local organizations
- Procedures outlined in DCR & DEQ Implementation Plan Guidance Document



Implementation Plan Development

- Implementation Plan is done locally
- Stakeholders have the opportunity to participate in the plan development
 - Public meetings
 - Working groups
 - Steering committee





Integration with other Watershed Plans

- Need to account for and acknowledge other planning activities within the watershed
- Coordinate with other water quality plans:
 - Watershed plans/roundtables
 - Local Comprehensive Plans
 - Water Supply Plans
 - Green Infrastructure Planning





What goes into an implementation plan?

- Existing plans or improvement projects
- Actions to improve water quality
- Project timeline
 - Implementation goals
 - Implementation milestones
- Roles and responsibilities
- Funding sources



Best Management Practices to Address Bacteria

Agricultural

- Riparian buffers
- Exclusion of livestock from streams
- Alternative watering source
- Rotational grazing
- Waste storage facilities







Best Management Practices to Address Bacteria

Residential/Urban

- Septic tank pumpout
- Septic system repair/replacement
- Alternative on-site septic systems
- Removal of straight pipes and gray water discharges
- Pet waste programs
- No-discharge zones (boats)



Potential Funding Sources

Potential funding sources for best management practices identified in Implementation Plans:

- USDA Programs CREP/EQIP
- Water Quality Improvement Fund
- State Revolving Loan Funds
- State Cost-Share Program
- State Tax Credits
- National Fish & Wildlife Foundation



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What can you do in the meantime?

- Show interest to agencies (comments to both DCR/DEQ)
- Continue BMP implementation
- Initiate outreach activities
- Continue stream monitoring
- Form watershed steering committee in each county
- Identify funding opportunities and partnerships











The \$ Challenge

The General Assembly appropriated funds to be targeted to TMDL impaired stream segments, but can only use funds for Agricultural BMP implementation, not implementation plan development

 We need a dedicated source of state funds for implementation planning

Currently, DCR has completed 23 IP's, including 61 impaired stream segments

Roanoke (5) Shenandoah (5) James (3) New (3)

Tennessee – Big Sandy (3)

Potomac (1)

Rappahannock (2)

Chesapeake Bay Coastal (1)

Under development now: Greenvale, Beach and Paynes Creeks, Middle River, Moffets and Polecat, Ash Camp and Twittys Creeks

DEQ has prepared ~14 DCR and DEQ have done 3 together

One last point to remember

TMDL's and IP's are a mechanism for restoring water quality and are an opportunity for diverse groups of people to come together to improve watershed health



Contact Information



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